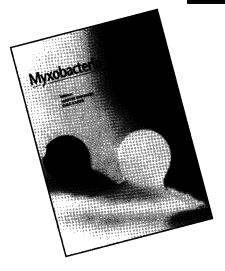
## **NEW FROM ASM PRESS**



## MYXOBACTERIA II

Editors: Martin Dworkin and Dale Kaiser

The myxobacteria have become one of the premier model systems for examining questions of prokaryotic development. They have been referred to as "social bacteria" and go through a complex life cycle involving cellular morphogenesis, fruiting body formation, and a variety of cell-cell interactions. Myxobacteria have been experimen-

tally domesticated and are amenable to the most sophisticated genetic, molecular, and biochemical manipulations.

Written by investigators from the leading myxobacterial laboratoin the world, **Myxobacteria II** brings the reader up-to-date on the various aspects of myxobacterial biology, development, and social behavior. The chapters review cell-cell signaling, the cell surface, protein kinase cascades, the nature of the genome, genetic approaches, developmental autolysis, protein export, myxospore and fruiting body morphogenesis, production of bioactive secondary metabolites, genetics and physiology of carotenoid synthesis, retrons, motility and tactic behavior, and transcriptional regulation of development.

#### Contents

- 1. Roland Thaxter and the Myxobacteria
- 2. Biology of the Myxobacteria: Ecology and Taxonomy
- 3. Cell Surfaces and Appendages
- 4. The Myxobacterial Genome
- 5. Retron Elements of the Myxobacteria
- 6. Genetic Approaches for Analysis of Myxobacterial Behavior
- 7. Genetics of Regulation and the Pathway of Synthesis of Carotenoids
- 8. Transcriptional Regulation of Developmental Gene Expression in Myxococcus xanthus
- 9. Developmental-Specific Gene Expression: Protein Serine/Threonine Kinases and Sigma Factors
- 10. Developmental Lysis and Autocides
- 11. Protein Secretion in Myxobacteria
- 12. Intercellular Signaling
- 13. Motility and Tactic Behavior of Myxococcus xanthus
- 14. Myxospore and Fruiting Body Morphogenesis
- 15. Stigmatella aurantiaca, an Organism for Studying the Genetic Determination of Morphogenesis
- 16. Production of Bioactive Secondary Metabolites

August 1993. Hardcover ISBN 1-55581-060-8. 404 pages, illustrations, index. List price: \$69.00. ASM Member: \$59.00. Shipping charges: U.S., \$1.50/book; Non-U.S., \$2.50/book.

ASM accepts VISA, American Express, MasterCard, EuroCard, purchase orders, and checks drawn on U.S. banks in U.S. dollars. Canadian orders must include 7% G.S.T. ASM Press, P.O.Box 605, Herndon, VA 22070 USA. Phone: (703) 787-3305. Fax: (703) 689-0660.

## CD-ROM DEMONSTRATION DISK NOW AVAILABLE!



The most exciting features of our newest product, ASM Journals on CD-ROM, are demonstrated in a floppy disk that is FREE for the asking!

The only requirements are that you have a PC/DOS-compatible computer plus a VGA color monitor and that you fax (202 737-0376) or mail a request for the floppy to: L. M. Illig, Journals Division, American Society for Microbiology, 1325 Massachusetts Ave., N.W., Washington, DC 20005-4171. For appropriate pricing information and accompanying literature, indicate "ASM member" or "nonmember" on your request.

Send for your floppy now! Quantities are limited.

#### E. COLI WALL MAP AVAILABLE

A limited supply of the following will be available from ASM: reprints of the article "Linkage Map of *Escherichia coli* K-12, Edition 8," by Barbara J. Bachmann (Microbiol. Rev. **54:**130–197, 1990) and wall charts (ca.  $21 \times 24\frac{1}{2}$ ") of the *E. coli* linkage map. Shipped together in a mailing tube. \$10.50, U.S.; \$11.24, Canada; \$12.50, other countries (surface).

Prices are subject to change without notice. All orders must be accompanied by payment in U.S. dollars, drawn on a U.S. bank located within the continental United States, or charged to Master-Card, VISA, or American Express. ASM does not accept wire transfers. Charge card orders may be placed by telephone (202-737-3600) or by fax (202-737-0368). Mail orders should be addressed to: American Society for Microbiology, Publication Sales, 1325 Massachusetts Ave., N.W., Washington, DC 20005-4171.

## ASM Style Manual

## for Journals and Books

This newly revised and updated edition will assist every author who submits papers to ASM. Prepared by ASM's professional editorial staff specifically for the ASM journals and books, the manual incorporates all of the information you need to ensure stylistically and grammatically correct manuscripts.

1887 ENTINA

The new edition includes two new chapters, "Proofreading" and "Books." In addition, it features in-depth instructions for assembling and editing the new References section, which recently replaced the Literature Cited section in ASM journal articles.

#### CONTENTS

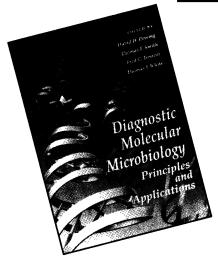
1. Preparation of Manuscripts; 2. Numbers and Measurements; 3. Scientific Nomenclature; 4. English; 5. Sources for Materials; 6. Abbreviations; 7. References; 8. Illustrations; 9. Tables; 10. Proofreading; 11. Books; 12. Words, Abbreviations, and Designations; Appendix A. Journal Specifications; Appendix B. Production Cycle; Bibliography; Index

Publication date: June 1991. Softcover, 188 pages plus index, illustrated, Members, \$23.00; nonmembers, \$28.00. Canadian residents add 7% to cover the GST.

Send order to ASM Press, P.O. Box 605, Herndon, VA 22070.



## **NEW FROM ASM BOOKS**



A new title in ASM's tradition of outstanding clinical microbiology manuals!

# DIAGNOSTIC MOLECULAR MICROBIOLOGY

## PRINCIPLES AND APPLICATIONS

Editors: David H. Persing, M.D., Ph.D., Thomas F. Smith, Ph.D., Fred C. Tenover, Ph.D., Thomas J. White, Ph.D.

Recent developments in nucleic acid-based diagnostics have the potential to profoundly influence the clinical microbiology labora-

tory and ultimately the way physicians treat their patients. **Diagnostic Molecular Microbiology** is the first major text to provide complete coverage of both the principles and applications of molecular diagnostic methods as they pertain to infectious diseases. Written and edited by leading international experts, this text provides both the theoretical and practical framework for understanding the powerful uses of nucleic acid amplification technologies and for applying these techniques to the rapid detection and characterization of microbial pathogens (bacterial, viral, fungal, parasitic) in the clinical laboratory.

The nine chapters in part I (Principles) summarize the basic scientific theory underlying the emerging discipline of molecular diagnostics. The sixty-six protocols in part II (Applications) offer proven applications of molecular diagnostic techniques for the diagnosis of infectious diseases — essentially a compendium of "molecular recipes" from leading laboratories around the world.

Written in the tradition of ASM's other classic manuals, **Diagnostic Molecular Microbiology** is a valuable reference and teaching tool for any clinical microbiology laboratory.

#### **CONTENTS**

Foreword (Albert Balows) Preface (David H. Persing)

- I. Principles of Diagnostic Molecular Microbiology
  - 1. Use of Nucleic Acid Probes for Detection and Identification of Infectious Agents
  - 2. Molecular Typing Methods
  - 3. Nucleic Acid Amplification Techniques
  - 4. Primer Target Selection and Optimization
  - 5. Amplification Product Inactivation Techniques
  - 6. Sample Preparation
  - 7. Amplification Product Detection Formats
  - 8. Laboratory Design and Work Flow
  - 9. Quality Control of Polymerase Chain Reaction

- II. Applications of Diagnostic Molecular Microbiology
  - Section 1. Bacterial Pathogens (21 protocols)
  - Section 2. Viral Pathogens (18 protocols)
  - Section 3. Fungal Pathogens (3 protocols)
  - Section 4. Parasitic Pathogens (6 protocols)
  - Section 5. Novel Organisms (4 protocols)
  - Section 6. Antimicrobial Resistance Loci
  - Section 7. Molecular Typing Methods (5 protocols)

(7 protocols)

Section 8. Methods (2 protocols)

Appendix. Suggested Materials Index

May 1993. Softcover ISBN 1-55581-056-X. 660 pages (est.), 70 figures. List and ASM Member price, \$59.00. Shipping charges: U.S., \$2.50/book; Non-U.S., \$4.50/book.

ASM accepts VISA, MasterCard, American Express, EuroCard, purchase orders, and checks drawn on U.S. banks in U.S. dollars. Canadian orders must include 7% G.S.T. ASM Press, P.O.Box 605, Herndon, VA 22070 USA. Phone: (703) 787-3305. Fax: (703) 689-0660.

## Continued scientific leadership.

## Journal of Bacteriology

The scope of the *Journal of Bacteriology* continues to reflect its status as the leading periodical, worldwide, devoted to the advancement of fundamental knowledge concerning bacteria and other microorganisms. Articles in the following subject areas are included: structure and function, plant microbiology, cell surfaces, eukaryotic cells, genetics and molecular biology, population genetics and evolution, plasmids and transposons, bacteriophages, physiology and metabolism, enzymes and proteins, and physical mapping of the *E. coli* chromosome. One or more minireviews are featured in each issue. These popular articles summarize developments in fast-moving areas and are invaluable to busy researchers who have limited time for extensive reading.

The twice-monthly publication instituted in 1991 means you get more science more quickly—and that's what keeping up-to-date is about in the 90s. The journal continues to be printed on acid-free paper to preserve its archival content for the future. Now JB is also available on compact disc (CD-ROM) for both Macintosh and MS-DOS personal computers.

..and now, a new look for the 9

RACTERIOLOGY

Editor in Chief: Graham C. Walker

**Editors:** Terrance J. Beveridge, James G. Ferry, Dan Fraenkel, Susan Gottesman, E. Peter Greenberg, Carol A. Gross, Dale Kaiser, A. L. Sonenshein, Kenneth N. Timmis, Robert A. Weisberg

ISSN 0021-9193 ● 8,600 pages/year ● twice monthly ● \$360.00 (U.S.A.) (Canadians add 7% GST) ● \$431.00 (other countries). Advance payment in U.S. dollars (or MasterCard, VISA, American Express, or Eurocard charge instructions) required. Members of ASM may subscribe at \$79.00 (U.S.A.) (Canadians add 7% GST), \$104.00 (other countries); limit is one personal subscription per member. Subscriptions start with the January issue.

For information and prices for a monthly CD-ROM subscription or yearly archival disc, fax (202 737-0367) or write to the Subscriptions Unit at the address given below.





### **NEW FROM ASM BOOKS**



Announcing the reissue of a classic reference work

## MEDICALLY IMPORTANT FUNGI

A Guide to Identification Second Edition

Davise H. Larone

This unique and extremely popular book has been reissued by ASM to answer the demand of laboratory personnel in need of reliable and simple guidelines for identifying fungi that are clinically encountered. The material is arranged so that the laboratorian can systematically reach a possible identification knowing only the macro- and microscopic morphology of an isolated organism. Many possible variants of organisms are

found under several categories of morphology and pigment. The outstanding characteristics are listed on the page(s) for each organism, and references are suggested for further information. The text is clear and uncomplicated; line drawings are used throughout to provide further visual detail. **Medically Important Fungi** is an essential part of the active clinical microbiologist's library and an important ancillary text for the increasingly important courses in mycology.

#### **Condensed Contents**

- 1. Guides
- II. Detailed Descriptions: Funguslike Bacteria, Yeasts and Yeastlike Organisms, Thermally Dimorphic Fungi, Thermally Monomorphic Molds

III.Laboratory Technique: Laboratory Procedures, Staining Methods, Media Illustrated Glossary

February 1993. Softcover ISBN 1-55581-058-6. 240 pages, line drawings, tables, glossary, index. List and ASM Member price, \$29.95. Shipping: U.S., \$1.50/book; Non-U.S., \$2.50/book.

ASM accepts VISA, MasterCard, American Express, EuroCard, purchase orders, and checks drawn on U.S. banks in U.S. dollars, Canadian orders must include 7% G.S.T. ASM Press, P.O.Box 605, Herndon, VA 22070 USA, Phone: (703) 787-3305, Fax: (703) 689-0660.

3MR

AMERICAN SOCIETY FOR MICROBIOLOGY

### **NEW FROM ASM BOOKS**



New edition of a popular text!

## DIAGNOSTIC MEDICAL PARASITOLOGY

SECOND EDITION

Editors: Lynne S. Garcia and David A. Bruckner

During the past four years, the field of diagnostic medical parasitology has seen dramatic changes, including newly recognized parasites, alternative techniques required by new regulatory requirements, implementation of testing based on molecular techniques, and an overall increased awareness of parasitic infections

due to complications in AIDS patients and health problems among immigrants. In response to these developments, Garcia and Bruckner have significantly revised and updated this popular reference/text. Their objective remains to provide a comprehensive discussion of both aspects of the field of diagnostic medical parasitology: first, a discussion of the parasites, and second, relevant diagnostic methods designed to detect and identify the organisms present.

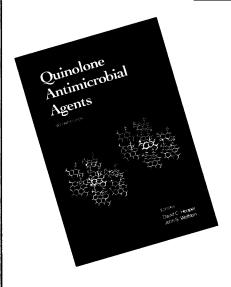
**Diagnostic Medical Parasitology** provides laboratorians, physicians, or other health care professionals with concise, clinically relevant, and cost-effective procedures for use in the clinical laboratory setting.

May 1993. Hardcover ISBN 1-55581-046-2. 760 pages (est.), illustrations, appendixes including tables and reference sources, glossary, index. List price: \$75.00. ASM Member: \$65.00. Shipping charges: U.S., \$3.50/book; Non-U.S., \$6.50/book.

ASM accepts VISA, MasterCard, American Express, EuroCard, purchase orders, and checks drawn on U.S. banks in U.S. dollars, Canadian orders must include 7% G.S.T. ASM Press, P.O.Box 605, Herndon, VA 22070 USA, Phone: (703) 787-3305, Fax: (703) 689-0660.

3MR

## **NEW FROM ASM PRESS**



## QUINOLONE ANTIMICROBIAL AGENTS SECOND EDITION

Editors: David C. Hooper and John S. Wolfson

Quinolones remain the most important class of antimicrobial agents discovered in recent years. Over 1000 have been synthesized and evaluated. Since the first edition in 1989, considerable strides

have been made in the research on structure-activity relationships, mechanism of action, resistance, pharmacodynamics, and drug interactions. For this reason, an expanded second edition has been organized to bring together in a single volume current information on a larger number of compounds and their expanding clinical applications.

Quinolones have been hailed for their potent in vitro effects, broader antibacterial spectrum, and long half-life in serum, but adverse effects have been seen with some of the more recently developed compounds. Increased bacterial resistance is a continuing and growing concern. In this new edition, *thirteen* new chapters have been added while the remaining chapters have been completely revised and updated to provide a knowledgeable summary of the problems and promises that quinolones hold for the treatment of infectious disease. Clinical and basic microbiologists, pharmacologists and pharmacists, and physicians – especially infectious disease specialists – will find this timely and expanded new edition essential reading.

Contents include these new chapters:

Structure-Activity Relationships

Quinolone-DNA Interaction

Mechanisms of Bacterial Resistance to Quinolones

Quinolone Resistance in Clinical Practice: Occurrence and Importance

Quinolones and Eukaryotic Topoisomerases

Pharmacokinetics of Fluoroquinolones in Selected Populations

Drug-Drug Interactions with Fluoroquinolone Antimicrobial Agents

Pharmacodynamics of the Fluoroquinolones

Role of Quinolones in Treatment of Chronic Bacterial Prostatitis

Treatment of Eye Infections

Veterinary Use of Quinolones

Effects of Quinolones on the Central Nervous System

Effects of the Quinolones on the Immune System

September 1993. Hardcover ISBN 1-55581-059-4. 563 pages, tables, figures, index. List price: \$79.00. ASM Member: \$65.00. Shipping charges: U.S., \$2.50/book; Non-U.S., \$4.50/book.

ASM accepts VISA, American Express, MasterCard, EuroCard, purchase orders, and checks drawn on U.S. banks in U.S. dollars. Canadian orders must include 7% G.S.T. ASM Press, P.O.Box 605, Herndon, VA 22070 USA. Phone: (703) 787-3305. Fax: (703) 689-0660.